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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER

I.E. DANG D

ART UNIT PAPER NUMBER

2834

DATE MAILED: 05 15 2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/833,865	BREYNAERT ET AL.	
	Examiner	Art Unit	
	Dang D Le	2834	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 March 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-16 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☒ The proposed drawing correction filed on 9/12/02 is: a) ☒ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Arguments

1. In view of the Appeal Brief filed on 3/10/03, PROSECUTION IS HEREBY REOPENED. A new ground of rejection is set forth below.

To avoid abandonment of the application, appellant must exercise one of the following two options:

(1) file a reply under 37 CFR 1.111 (if this Office action is non-final) or a reply under 37 CFR 1.113 (if this Office action is final); or,

(2) request reinstatement of the appeal.

If reinstatement of the appeal is requested, such request must be accompanied by a supplemental appeal brief, but no new amendments, affidavits (37 CFR 1.130, 1.131 or 1.132) or other evidence are permitted. See 37 CFR 1.193(b)(2).

2. Applicant's arguments filed 3/10/03 have been fully considered but they are not persuasive. Before Figure 1 was changed to add reference numeral 100 and the Specification was amended to identify the electronic circuit as item 100, the examiner had never thought that "a current supply source" in claim 1 was "the electronic circuit" in paragraph 18. Honestly, the examiner could only guess "a current supply source" being a battery or terminals although the examiner has never seen "a 12-volt battery in a vehicle mounted on a printed circuit board". Nevertheless, the amendment filed 9/12/02 overcame the rejection of claims 1-16 under U.S.C. 112, first paragraph.

However, during examination, the pending claims must be "given the broadest reasonable interpretation." In the art of motor and generator, "a current supply source" can also be understood as "a battery" or "a terminal" besides "the electronic circuit". Therefore, "a current supply source" in claim 1 can be interpreted as a terminal for supplying current to the motor. The terminal 203 of Hulsmann et al. not only conducts the power (from a current source such as a battery) but also supplies the current to the motor. Therefore, it would have been obvious to one having ordinary skill in the art to add the terminals 203 of Hulsmann et al. (U.S. Pat. No. 6,107,713) to the printed circuit board of Weber et al. (WO 98/27460) in order to provide electric current to the motor.

In addition, the specification does not clearly call out "a current supply source". Although the term (i.e. "a current supply source") of a claim may appear to be definite, inconsistency with the specification disclosure or prior art teachings may make an otherwise definite claim take on an unreasonable degree of uncertainty. In re Cohn, 438 F.2d 989, 169 USPQ 95 (CCPA 1971); In re Hammack, 427 F.2d 1378, 166 USPQ 204 (CCPA 1970).

Furthermore, there is no apparent reason why applicant was prevented from changing "a current supply source" in claim 1 to "an electronic circuit" so that inconsistency within the specification disclosure can be avoided.

It is noted that although Weber et al. do not show the guidance system 14, 16, and 18 contacting the printed circuit board 20, the pending claims neither clearly recite "the magnetic flux conduction member" contacting the printed circuit board.

As a result, the rejection of claims 1-16 under U.S.C. 112, second paragraph and the rejection of claims 1-5, 8-10 and 14-16 under 35 U.S.C. 103(a) as being unpatentable over Weber et al. (WO 98/27460) in view of Hulsmann et al. (U. S. Pat. No. 6,107,713) are still deemed proper and retained in this office action.

Specification

3. The amendment to paragraph 18 filed 9/12/02 has been entered.

Claim Rejections - 35 USC § 112

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claims 1-16 are rejected under 35 U.S.C. 112, second paragraph, as being incomplete for omitting essential structural cooperative relationships of elements, such omission amounting to a gap between the necessary structural connections. See MPEP § 2172.01.

The omitted structural cooperative relationships are: the printed circuit having a current supply source for the motor fixed thereon. It is not known if the current supply source and the magnetic flux conduction member have any structural cooperative relationships. In other words, it is not sure if the magnetic flux conduction member is claimed to contact the printed circuit board as recited in claims 1 and 10.

Regarding claim 2, it is not clear if the metal pin is a different part in the connector.

Regarding claim 4, it is not clear if the power contacts are different parts in the connector.

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

7. Claims 1-10 and 14-16 are rejected under 35 U.S.C. 102(e) as being anticipated by Weber et al. (U.S. Pat. No. 6,043,576).

Regarding claim 1, Weber et al. show a connector for an electric motor (1, Figure 1a), adapted so as to be fixed on said motor including a magnetic ring (20) which is a seat of a magnetic field related to operating parameters of said motor, wherein said connector comprises a magnetic flux conduction member (22) forming a flux concentrator interposed, when said connector is fixed on the motor, between said magnetic ring (20) and a Hall-effect sensor (28, 30) adapted so as to measure magnetic flux conducted by said magnetic flux conduction member and a printed circuit (17) having a current supply source (19) for the motor fixed thereon.

Regarding claims 2, it is noted that Weber et al. also show said magnetic flux conduction member comprising at least one metal pin (those on board 17) adapted so that a part of said pin, when said connector is fixed on said motor, lies in a vicinity of said magnetic ring.

Regarding claim 3, it is noted that Weber et al. also show said magnetic flux conduction member comprising two metal pins (22, 24, 26) having free ends disposed symmetrically with respect to an axial plane of said magnetic ring.

Regarding claim 4, it is noted that Weber et al. also show said connector further comprising at least two electrical power contacts linked to said supply source for said motor.

Regarding claims 5-7, it is noted that Weber et al. also show at least one of said electrical power contacts being disposed so as to constitute a part of said magnetic flux conduction member.

Regarding claim 8, it is noted that Weber et al. also show said connector being secured to said printed circuit on which said Hall-effect sensor is disposed.

Regarding claim 9, it is noted that Weber et al. also show said connector being adapted so as to be fixed in a detachable manner on said electric motor.

Regarding claim 10, it is noted that Weber et al. also show a geared motor for an automobile accessories comprising a rotor shaft equipped with a magnetic ring, wherein said motor comprises a connector.

Regarding claim 14, it is noted that Weber et al. also show the two metal pins made of steel.

Regarding claim 15, it is noted that Weber et al. also show the two metal pins being parallel.

Regarding claim 16, it is noted that Weber et al. also show the electrical power contacts including an end and a metal pad being inserted into the end of each of the electrical power contacts which overlap the magnetic ring (Figures 1a and 1b).

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

10. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Weber et al. in view of Jager et al. (6,016,055).

Regarding claim 2, Weber et al. show all of the limitations of the claimed invention except for the metal pin.

Jager et al. use metal pin (10) for the purpose of concentrating magnetic field.

Since Weber et al. and Jager et al. are all from the same field of endeavor; the purpose disclosed by one inventor would have been recognized in the pertinent art of the others.

It would have been obvious at the time the invention was made to a person having ordinary skill in the art to use metal pin as taught by Jager et al. for the purpose discussed above.

11. Claims 11-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Weber et al. in view of Wiesler (G,127,752).

Regarding claims 11-13, Weber et al. show all of the limitations of the claimed invention except for said automobile accessory being a window, a seat or a sunroof.

Wiesler shows said automobile accessory being a window, a seat or a sunroof for the purpose of automation.

Since Weber et al. and Wiesler are all from the same field of endeavor; the purpose disclosed by one inventor would have been recognized in the pertinent art of the others.

It would have been obvious at the time the invention was made to a person having ordinary skill in the art to make said automobile accessory as a window, a seat or a sunroof as taught by Wiesler for the purpose discussed above.

12. Claims 1-5, 8-10 and 14-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Weber et al. (WO 98/27460) in view of Hulsmann et al. (U. S. Pat. No. 6,107,713).

Regarding claim 1, Weber et al. show a connector for an electric motor (30, Figures 1-4a), adapted so as to be fixed on said motor including a magnetic ring (10) which is a seat of a magnetic field related to operating parameters of said motor, wherein said connector comprises a magnetic flux conduction member (14, 16, 18) forming a flux concentrator interposed, when said connector is fixed on the motor, between said magnetic ring (10) and a Hall-effect sensor (22, 24) adapted so as to measure magnetic flux conducted by said magnetic flux conduction member.

Weber et al. do not show a printed circuit having a current supply source for the motor fixed thereon.

Hulsmann et al. show a printed circuit (Figure 3, 22) having a current supply source (203) for the motor fixed thereon for the purpose of providing electric power to the motor.

Since Weber et al. and Hulsmann et al. are all from the same field of endeavor; the purpose disclosed by one inventor would have been recognized in the pertinent art of the others.

It would have been obvious at the time the invention was made to a person having ordinary skill in the art to fix a current supply source on a printed circuit as taught by Hulsmann et al. for the purpose discussed above.

Regarding claim 2, it is noted that Weber et al. also show said magnetic flux conduction member comprising at least one metal pin adapted so that a part of said pin, when said connector is fixed on said motor, lies in a vicinity of said magnetic ring (Figure 2).

Regarding claim 3, it is noted that Weber et al. also show said magnetic flux conduction member comprising two metal pins (16, 18) having free ends disposed symmetrically with respect to an axial plane of said magnetic ring (Figure 3).

Regarding claim 4, it is noted that Weber et al. also show said connector further comprising at least two electrical power contacts (Figure 1) linked to said supply source for said motor.

Regarding claim 5, it is noted that Weber et al. also show at least one of said electrical power contacts being disposed so as to constitute a part (power contacts contacting circuit board on which elements 14, 16, 18 are mounted) of said magnetic flux conduction member.

Regarding claim 8, it is noted that Weber et al. also show said connector being secured to said printed circuit (20) on which said Hall-effect sensor (22, 24) is disposed.

Regarding claim 9, it is noted that Weber et al. also show said connector being adapted so as to be fixed in a detachable manner on said electric motor.

Regarding claim 10, it is noted that Weber et al. also show a geared motor for an automobile accessories comprising a rotor shaft (12) equipped with a magnetic ring (10), wherein said motor comprises a connector (Figure 1).

Regarding claim 14, it is noted that Weber et al. also show the two metal pins made of steel.

Regarding claim 15, it is noted that Weber et al. also show the two metal pins being parallel.

Regarding claim 16, it is noted that Weber et al. also show the electrical power contacts including an end and a metal pad being inserted into the end of each of the electrical power contacts which overlap the magnetic ring.

13. Claims 6 and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Weber et al. in view of Hulsmann et al. as applied to claim 5 above, and further in view of Blanchet (5,453,649).

Regarding claim 6, the connector of Weber et al. modified by Hulsmann et al. includes all of the limitations of the claimed invention except for said power contact constituting a part of said magnetic flux conduction member being connected, when said connector is fixed on said motor, to a metal pad secured to said motor and a part of which lies in a vicinity of said magnetic ring.

Blanchet shows said power contact (94) constituting a part of said magnetic flux conduction member being connected, when said connector (60) is fixed on said motor, to a wire (92) secured to said motor and a part of which lies in a vicinity of said magnetic ring for the purpose of providing electricity to the motor.

Since Weber et al., Hulsmann et al. and Blanchet are all from the same field of endeavor; the purpose disclosed by one inventor would have been recognized in the pertinent art of the others.

It would have been obvious at the time the invention was made to a person having ordinary skill in the art to connect said power contact constituting a part of said magnetic flux conduction member, when said connector is fixed on said motor, to a

metal pad secured to said motor and a part of which lies in a vicinity of said magnetic ring as taught by Blanchet for the purpose discussed above.

Regarding claim 7, it is noted that Weber et al. also show said power contact constituting a part of said magnet flux conduction member being made of steel.

14. Claims 11-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Weber et al. in view of Hulsmann et al. as applied to claim 10 above, and further in view of Wiesler (6,127,752).

Regarding claims 11-13, the motor of Weber et al. modified by Hulsmann et al. includes all of the limitations of the claimed invention except for said automobile accessory being a window, a seat or a sunroof.

Wiesler shows said automobile accessory being a window, a seat or a sunroof for the purpose of automation.

Since Weber et al., Hulsmann et al. and Wiesler are all from the same field of endeavor; the purpose disclosed by one inventor would have been recognized in the pertinent art of the others.

It would have been obvious at the time the invention was made to a person having ordinary skill in the art to make said automobile accessory as a window, a seat or a sunroof as taught by Wiesler for the purpose discussed above.

Information on How to Contact USPTO

15. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dang D Le whose telephone number is (703) 305-0156. The examiner can normally be reached on Monday through Friday.


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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nestor Ramirez can be reached on (703) 308-1371. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9318 for regular communications and (703) 872-9319 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-1782.

May 9, 2003

A handwritten signature in cursive script, appearing to read "Dang Le".

DANG LE
PRIMARY EXAMINER